

# EPA New England Regional Laboratory

Office of Environmental Measurement and Evaluation Hot Topics Lab Overview July 2018 Johanna Hunter – EPA Region 1





### Integrated Science Center

#### **Chemistry & Biology Laboratories**

 Analyze 10,000-15,000 water, soil, sediment, air, biological, and waste samples annually

#### **Specialized Lab Services**

- Method 537 for Per and Polyfluorinated Alkyl Substances (PFAS)
- Human Source Tracking Analysis (Illicit Discharge Detection)
- ELISA for cyanotoxins

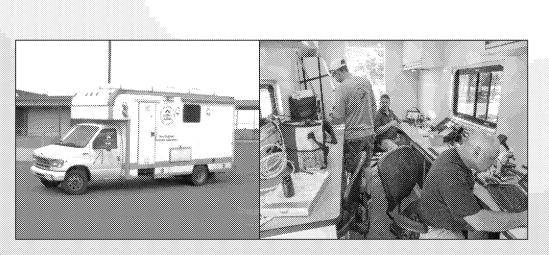


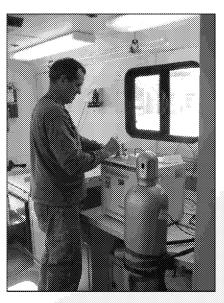


### Integrated Science Center – Field Work

#### **Chemistry & Biology Mobile Labs**

- Provide on-site chemical analysis for rapid field assessment of soil, water and soil gas
- Platform for sample processing, field staging, field microbiology analysis, and education and training programs

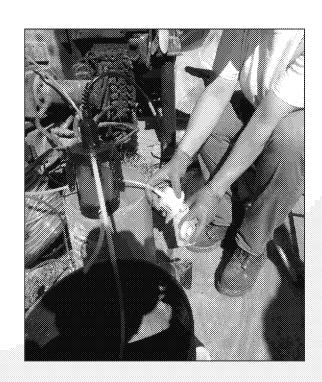






### Quality System Management

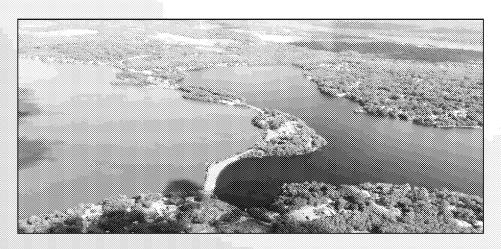
- National leader in developing quality assurance guidance for citizen science data collection
- Conduct audits of state laboratories and state laboratory certification programs under the Drinking Water Program
- Data used for site cleanups, air quality designations, and water quality planning are of known quality and defensible





# Emerging Science – Cyanobacteria

- Innovation. Cyanobacteria monitoring tools and community outreach
- Collaboration. Partnerships with ORD, OW, states, NGOs, citizens







# Emerging Science – New Technologies

- Real-Time. Deployable sensors and inwater buoys
- Micro-Sized. Phylochip technology
- Remote-Sensing. Pilot UAV projects

